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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,031	10/30/2001	David A. Kiss	INTO-0011-US (P13281)	7479

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EXAMINER

CLARK, SHEILA V

ART UNIT PAPER NUMBER

2815

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,031

Applicant(s)

Kiss

Examiner

Sheila V. Clark

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 25, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-24 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haba et al in view of Mauritz et al, Hsuan et al (6,236,109) and Kim et al.

Haba et al shows a package integrated circuit comprising processor and a plurality of memory die (see col.1, lines 10-12). It has long been the convention in this technology to provide several types of memory devices and processors in a single package to reduce processing costs, package volume, improve signal transmission. The focus of the teachings of Haba et al is on the package arrangement that may employ the conventional chips recited in the claims of the instant invention. Haba et al also clearly teaches the convention of packaging the types of devices including stacked structures claimed in the instant invention in a single package but fails to teach a folded stack and specific use of a certain specific types of memory claimed. It is however deemed that Haba et al suggests use of all various types memory devices that may be utilized in this art which would include those recited in the claims. Mauritz teaches in figures 1 and 2 integrated circuit packages having plurality of chips including a processor 12, cross point memory in a spare chip 22 and volatile memory chip 16. Clearly these specific types of devices may be employed in the chip arrangement of Haba et al because it has long been the convention in this technology to

for the event that packaging is given patentable we get

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provide several types of memory devices and processors in a single package to reduce processing costs, package volume, improve signal transmission as Hsuan also teaches in col.1, line 35-41.

Folded stacked structures would be further obvious in view of the teachings of Kim et al

The invention of Haba et al is deemed to inherently utilize the steps of providing, coupling and packaging.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
Claims 1, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mauritz et al..

Mauritz teaches in figures 1 and 2 integrated circuit packages having plurality of chips including a processor 12, cross point memory in a spare chip 22 and volatile memory chip 16.

Claims 1-24 are rejected.

Applicant's arguments filed 7-25-2002 have been fully considered but they are not persuasive. The prior art references are deemed to teach the features of the invention as they are broadly recited. Applicant alleges that non of the references teach forming the combination of a processor and two different types of memory within a package and that Mauritz teaches a non integrated and non packaged computer system. Contrary to applicant's assertions Mauritz et al clearly a packaged device and teaches in for example column 1, line 1 that his invention relates to semiconductor memories, in line 23 and teaches said device is formed on a board (i.e printed

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circuit board), in line 26 he discusses that said memory is on a chip, and in line 38 he discusses that said memory can be directed to a DRAM device, all packaged integrated circuit devices. Further the claims of Mauritz recite that the memory device is all part of the central processing unit another description of a packaged chip device. Clearly a packaged semiconductor device is taught by Mauritz wherein a memory system is formed on a board having a processor, crosspoint memory and ROM memory. The claims of the instant invention recite only a packaged integrated circuit reciting no details relative to what structural features said package comprises or how claimed devices are oriented in said package. Integrated circuit semiconductor devices are commonly -formed on a substrate such as a printed circuit board and may be formed with anywhere from one to hundreds of chips all packaged together. Further a wafer or chip may be formed of hundreds of circuits individually and in chip form all packaged together and thus an integrated circuit chip device. Clearly an integrated circuit chip structure this is taught by Mauritz and a chip is a packaged device. Similar is the case for Haba et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

a shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

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1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner S.V. Clark whose telephone number is (703) 308-4924.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee, can be reached on (703) 308-1690. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722 or 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

October 18, 2002


SHEILA V. CLARK
PRIMARY EXAMINER